The opinion in support of the decision being entered today was  $\underline{\text{not}}$  written for publication and is  $\underline{\text{not}}$  binding precedent of the Board.

## UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte PIERRE JEANVOINE, TANGUY MASSART, RAMON RODRIGUEZ, ARMANDO RODRIGUEZ and JUAN-ANDRES NUNEZ

Application No. 09/381,631

HEARD: MAY 23, 2006

MAY 3 1 2006

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before KIMLIN, WARREN and FRANKLIN, <u>Administrative Patent Judges</u>.

KIMLIN, <u>Administrative Patent Judge</u>.

## DECISION ON APPEAL

This is an appeal from the final rejection of claims 38-40, 42-46, 50, 56, 77, 78, 98, 101-106, 115 and 116. Claims 41, 47-49, 51-55, 57-76, 79-97, 99 and 107-114 stand withdrawn from consideration as being directed to a non-elected invention. Claim 38 is illustrative:

38. Process of manufacturing glass from vitrifiable materials comprising a step of supplying all or part of the thermal energy necessary for melting vitrifiable materials by injecting a combustible mixture comprising at least one fuel and at least one oxidizer gas, or gaseous products resulting from combustion of the combustible mixture, below the level of the mass of said vitrifiable materials, and melting said vitrifiable materials, wherein said vitrifiable materials comprise liquid or solid combustible elements, or mixtures thereof, and materials selected from the group consisting of batch materials, cullet, vitrifiable waste, and mixtures thereof, and manufacturing glass from said melted vitrifiable materials.

In the rejection of the appealed claims, the examiner relies upon the following references:

Greve 4,983,549 Jan. 8, 1991 Floyd et al. (Floyd) 5,615,626 Apr. 1, 1997

Appellants' claimed invention is directed to a process for manufacturing glass from vitrifiable materials, such as vitrifiable waste. A combustible mixture comprising a fuel and an oxidizer gas is injected below the vitrifiable material for melting the same.

Appealed claims 38, 39, 42-45, 50, 56 and 98 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Floyd. Claims 40, 46, 78, 101-104, 106, 115 and 116 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Floyd. Claims 77 and 105 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Floyd in view of Greve.

We have thoroughly reviewed each of appellants' arguments for patentability. However, we find that the examiner's rejections are factually supported by the prior art relied upon and in accordance with current patent jurisprudence.

Accordingly, we will sustain the examiner's rejections for the reasons set forth in the answer, which we incorporate herein, and we add the following for emphasis only.

We consider first the examiner's Section 102 rejection over Floyd. Appellants do not dispute that Floyd, like appellants, discloses a process for melting waste material that contains vitrifiable materials by injecting a combustible mixture comprising at least one fuel and at least one oxidizer gas below the level of the mass of waste material. It is appellants' principal contention that Floyd does not manufacture glass as the term would be understood by one of ordinary skill in the art. Although appellants acknowledge that the slag product of Floyd comprises a glassy phase¹ and the slag of Floyd "is disclosed as a 'glassy' byproduct,"² it is appellants' contention that Floyd

<sup>&</sup>lt;sup>1</sup>See page 5 of principal brief, second paragraph, penultimate sentence.

<sup>&</sup>lt;sup>2</sup>Page 6 of principal brief, second paragraph.

"still does not disclose manufacturing glass." Appellants maintain that the slag disclosed by Floyd "is not suggestive of anything with regard to manufacturing glass." Appellants argue that the slag of Floyd is used "only as a building material, for such engineering purposes as shot blasting, or for a disposal for landfill."

The flaw in appellants' argument is that appellants want the claim recitation "[p]rocess of manufacturing glass" (claim 38) to be narrowly interpreted as making commercial-grade glass.

However, such a narrow interpretation is not in keeping with the long-accepted requirement that claim language during prosecution be given its broadest reasonable interpretation. In the present case, we concur with the examiner that the claimed process of making glass reasonably encompasses processes for making glassy material of all grades and purity level. As noted by the examiner, appellants do "not claim or disclose a proportion of glass in the feed stream or product of the invention."

 $<sup>^{3}</sup>$ Id.

⁴Id.

<sup>&</sup>lt;sup>5</sup>Sentence bridging pages 6 and 7 of principal brief.

<sup>&</sup>lt;sup>6</sup>Page 8 of answer, first paragraph.

Like the examiner, we find that Floyd manufactures a slag that comprises glassy material which meets the requirement of the presently claimed glass. Floyd expressly states that "[t]he slag of the bath is a silica-based slag, containing in solution at least one other oxide such as lime, magnesia, alumina, sodium oxide, potassium oxide, iron oxide and manganese oxide."7 Also, Floyd describes the slag as "a glassy phase which is essentially non-porous, with the oxides in solution which lowers their activities."8 In addition, we perceive no distinction between the "vitrifiable waste" processed in the claimed invention and the exemplified waste of Floyd which, as pointed out by the examiner, has a considerable percentage of vitrifiable oxides (see Table at column 13). We observe that appellants' specification discloses that vitrifiable materials in accordance with the present invention may comprise organic matter such as polymer binders, plastics, etc.9

Appellants maintain that "the present invention intentionally treats vitrifiable materials" while Floyd "at best,

<sup>&</sup>lt;sup>7</sup>Column 6, lines 3-6.

<sup>&</sup>lt;sup>8</sup>Column 6, lines 57-58.

<sup>9</sup>See page 9 of specification, last paragraph.

treats vitrifiable materials only if such materials happen to be present in their municipal or industrial waste."<sup>10</sup> However inasmuch as Floyd exemplifies the production of a glassy slag from vitrifiable waste, i.e., Floyd describes the claimed process, we find appellants' argument to be without merit.

Turning to the examiner's Section 103 rejection of claims 40, 46, 78, 101-104, 106, 115 and 116 over Floyd, we concur with the reasoning set forth at pages 5 and 6 of the answer. We note that, for the most part, appellants' arguments focus upon the asserted failure of Floyd to disclose the manufacture of glass. As for the preheating step of claim 46, we disagree with appellants that the examiner's position is based upon unsupported speculation. Appellants have advanced no factual criticism of the examiner's finding that the incineration of organic matter would take place at a temperature well below 900°C. In any event, we are confident that one of ordinary skill in the art would have found it obvious to determine the optimum preheating temperature based upon the composition of the feed.

As for the examiner's Section 103 rejection of claims 77 and 105 over Floyd in view of Greve, we find no error in the

<sup>10</sup>Page 6 of principal brief, second paragraph.

examiner's reasoning that it would have been obvious for one of ordinary skill in the art to include laminated glass or mineral fibers with organic binders in the waste feed of Floyd.

As a final point, we note that appellants base no argument upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the <u>prima facie</u> case of obviousness established by the examiner.

In conclusion, based on the foregoing and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136 (a)(1)(iv).

## **AFFIRMED**

EDWARD C. KIMLIN

Administrative Patent Judge

CHARLES F. WARREN

Administrative Patent Judge

APPEALS AND

BOARD OF PATENT

BEVERLY A. FRANKLIN

Administrative Patent Judge

INTERFERENCES

ECK/hh

. . . .

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314